R E P O R T R E S U M E S

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DESIGN FOR A PLAYROOM.
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DESCRIPTORS- *PLAY THERAPY, *EMOTIONALLY DISTURBED CHILDREN, BEHAVIORAL SCIENCE RESEARCH, TOYS, RESEARCH NEEDS, *RESEARCH DESIGN, *PHYSICAL DESIGN NEEDS,

ALTHOUGH IT IS ASSUMED THAT PLAY THERAPY IS BENEFICIAL TO CHILDREN, LITTLE RELEVANT RESEARCH DATA IS AVAILABLE CONCERNING THE NATURE AND EXTENT OF ITS EFFECTIVENESS. THE EXISTING PAUCITY OF RESEARCH INFORMATION CONCERNED WITH PLAYROOM BEHAVIOR IS ATTRIBUTABLE TO (1) THE INADEQUATE CONCEPTUALIZATION OF RELEVANT THEORY AND OF THE SITUATIONAL VARIABLES, (2) AN INSUFFICIENT CONCERN WITH THE PHYSICAL CHARACTERISTICS OF THE PLAYROOM ENVIRONMENT, (3) THE ECONOMIC WASTE TRADITIONALLY ASSOCIATED WITH PLAYROOM RESEARCH, AND (4) THE DIFFICULTIES ENCOUNTERED IN ATTEMPTING TO CATEGORIZE PLAY BEHAVIOR. IN ORDER TO ACCOUNT FOR THESE SHORTCOMINGS, PLAY THERAPY FACILITIES CONSISTING OF 2 ADJACENT BUT INTERCONNECTED ROOMS SHOULD BE CONSTRUCTED. THE 2 ROOMS SHOULD CONTAIN, RESPECTIVELY, TOYS WHICH PERMIT THE EXPRESSION OF CONSTRUCTIVE AND AGGRESSIVE BEHAVIOR. TIMERS AND/OR COUNTERS CONNECTED TO EACH OF THE TOYS SHOULD BE TAPE-PUNCHED TO ALLOW DIRECT COMPUTER ANALYSIS OF TIME SPENT IN EACH OF THE ROOMS AND WITH EACH OF THE TOYS. A MASTER CONTROL BOOTH EQUIPPED WITH A ONE-WAY MIRROR AND CONTAINING THE METERING EQUIPMENT WOULD PERMIT THE USE OF TRADITIONAL OBSERVATION AND TAPE-RECORDING PROCEDURES. A PLAYROOM AREA CONSTRUCTED IN THIS MANNER WOULD NOT INTERFERE WITH CLINICAL PRACTICE AND WOULD PERMIT THE GATHERING OF RESEARCH DATA CONCERNED WITH THE EFFECTIVENESS OF PLAY THERAPY. (JS)

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Design for a Playroom

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It is assumed that playtherapy is beneficial to children, but we do not know under which conditions and with what kind of children or behavior. Levitt's reviews (1957, 1963) raised serious questions about the effectiveness of playtherapy and indicated the depths of our ignorance. Absence of relevant reserach data from playroom behavior of children (Haworth, 1964; Kessler, 1966) has prompted the writer to think about more appropriate modes of conceptualization that will make this behavior amenable to more adequate observation and eventual control.

There are countless playrooms in child guidance clinics, mental health clinics, hospitals, and the like. The ratio of space occupied by these playrooms to research coming out of them is probably one of the smallest between physical facilities and research output in psychological rehabilitation. Among the problems that do not facilitate controlled observation is the fact that the playroom is a less than systematic array of toys more or less arbitrarily set up at the whim and bias of the particular playtherapist. There is a wide gap between what happens in the playroom and what comes out in terms of results that can be shared intersubjectively.

What are the reasons for this lack of knowledge? Our awareness of the shortcomings of playrooms should also suggest ways and means to conceptualize them in a manner that will yield more valid and reliable information. The shortcomings that come to mind need to be differentiated into a) conceptual, b) physical, c) economic, and d) human.

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Cocneptually, one must ask why no relevant research is possible with playrooms. Playtherapy has been a relatively static field characterized by clichés, myths, and very little innovation. One of the major reasons for this lack of change could be found in the lack of research--either in the outcome or in the

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* I am indebted to Paul Ellen for discussions about various aspects of this proposal.

process. As far as outcome research is concerned, suggestions for more efficient baseline and post-therapy evaluations have been presented elsewhere (L'Abate, M.S. in preparation). However, attention should be given to the process of playtherapy as well as to continuous links between pretherapy baselines, outcome criteria, and follow-up. Such links may be available in the case of adults where a great deal of research has taken place, but they are completely nonexistent in playtherapy behavior. Masling (1966) suggested verbatim recordings and "good films." Certainly this line of research should be explored. However, this type of data is difficult to reduce to manageable quantities. Furthermore, as long as the child is left in the same room the problem of classifying his behavior is going to remain a crucial one.

Among the conceptual shortcomings, we must consider lack of relevant theory. Although speculations and theoretical positions are available in terms of orthodox and reformed psychoanalytic thinking (Anna Freud, 1946; Klein, 1932), nondirective permissiveness (Axline, 1947; Dorfman, 1951), learning-theory simplifications (Ross, 1964), and eclecticism (Allen, 1942; Lippman, 1956), there is a lack of <u>testable</u> propositions that when derived logically or empirically from a body of theory will provide feedback to support or to discourage a theory. Links between theory and play behavior, if and when theoretical positions are tested, are too generic or too vague (or both) to allow direct empirical verification. As Esman (1965) characterized the whole field of treatment of personality disorders in children:

> "It is a realm in which dogmas languish and stereotypes melt away, in which the race is to the clear in mind and the young in spirit. Above all else, it is the area of treatment which offers the best hope of prevention of future distress."

Watson (1959) commented on this point, "Concerning play techniques, the greatest need at the present is further work in systematizing the situational variables concerned." He suggested systematic experimental variations in the kind and degree of realism in materials which would be available, as well as in

the extent of experimenter-child interaction. He concluded thusly:

> "The interpretations that psychotherapists make from play therapy seem real, vivid, and plausible in some circumstances. On other occasions, they do not and skepticism and repudiation seem called for. But is one right in his acceptances and in his rejections? Only research . . . will demonstrate the nature and the trustworthiness to be placed in findings from play therapy."

Discussions of physical aspects of the playroom have limited themselves to the quality and nature of toys (Allen, 1942), the necessity for a sink, and other inconsequential details (like dolls, Levin and Wardwell, 1962) of little relevance to the behavior of the child in the playroom. No concern has been given to the connection between conceptualization and physical characteristics of the playroom--any room with a sink will do. Of course, a oneway mirror for observation would be necessary for research and training purposes. One sees quite a few playrooms with an adjacent observation room and oneway mirror not being used in any fashion after the initial spurt of enthusiasm.

The third shortcoming of playrooms, as traditionally conceived, is their economic waste in terms of knowledge and results. At best, any research project comes around to observation, recordings, and problems of finding repeatable categories of behavior that will allow reliable observations in the hands (and eyes) of human observers. Since one observer is usually unreliable, at least two are necessary. However, even if two individuals, so trained, existed to assume such a passive role, how much time a day could they spend observing and recording? The answer to this question is unknown. Suffice it to note, however, that as far as this writer knows, no one could be asked to spend longer than two or three hours a day shut up in a cramped, dark, observation cubicle. Furthermore, would the cost of maintaining observers justify the results obtained? On the basis of his experience, this writer would answer negatively. Data analysis of films, as suggested by Masling, would still remain time consuming and

expensive. Masling's point that "more experimentation in clinical techniques is needed" is well taken and consistent with the purposes of the present design. Masling added that the rut in which most clinics fall in following some version of psychoanalytic therapy is obviously comfortable but will not solve the problems of the lower class child. From the lower class child, one could generalize to all children who need help. Playrooms as conceived traditionally could not begin to assume the responsibilities or fill the demands of the present or of the future.

Most of the preceding shortcomings are minimal compared to the human problems incumbent to observing the child's behavior. How can we categorize how the child is behaving? For instance, is fingerpainting an index of aggression or catharsis? Observation and recording of this type of behavior would make it very difficult to separate aggressive from constructive behavior. Yet, this separation would appear basic to the clarification of the behaviors in question. Traditionally, the child is presented with a vast array of aggressive and constructive toys from which he selects at will. Or else, according to the theoretical persuasions of his therapist, a few preselected toys are available to him. However, such selection is essentially arbitrary and, again, links between theory and nature of toys are flimsy or open to individual interpretation at best.

Although human factors should be first in our consideration, they are considered lastly because their overlap with the other factors indicates the need for conceptual and physical separation of at least two general classes and phases of playroom behavior, namely: a) aggression and b) construction. In a traditional playroom, aggression and construction get mixed up very frequently. This confusion makes it very difficult to measure the behavior desired. In order to account for this shortcoming, as well as others already noted, the best way to study playroom behavior would be to have two separate, adjacent but interconnected playrooms, one with aggressive toys and the other with toys which essen-

tially lead toward construction and cooperation. The child would then go from one room to the other depending upon what kind of behavior he would like to emit. Every time he goes into the aggression room, flipping the light switch on would activate a timer. The timer would stop whenever the child comes out of the aggression room with his therapist, who would switch off the light. Another timer would account for time in the construction room.

Toys of a constructive nature besides the pinball machine already used by Premack (1965) are commercially available, such as "Pitch and Bat," where two operators need to play together to score or an electronic "Shuffle Alley" as commonly found in bars, amusement parks, penny arcades, and railroad or bus depots. The initial cost of buying equipment could be defrayed by its durability and maximum usage, since there would be no wastage or breakage as in a traditional playroom. Other constructive toys could be available on specially constructed shelves where a lever would start a timer whenever a child lifts a toy package off the shelf. Thus, measurements would be available for total time in each playroom, total time with each toy or game, and in addition, counters would account for the frequency of usage for each of the toys or games in each playroom.

Most aggressive toys would be continuously firing guns and pistols, whose recording would occur in terms of time and frequency of usage--the on-switch would start a timer. The trigger would be connected to a counter to measure how many times a child fires. Instead of the usual showy doodads, targets to be selected by the child could be changed to represent human (woman, man, child, authroity) figures, animal, and inanimate figures, (e.g., for precision of target shooting). These targets could also be connected to appropriate counters which would all lead to a master control observation booth with tape recorder and oneway mirror, split in the middle to allow observation of both playrooms. Eventually all of these timers and counters could be tape-punched, according to the system proposed by Ellen and Wilson (1963) and expanded more

recently by Barry et al. (1966) to accommodate more input channels. It would be relatively expensive ($5,000+) to equip these playrooms with tape punchers and similar hardware, but if the play input were great, in the long run it would justify itself since this type of tape would allow direct computer analysis.

The types of toys and games available to the child will be limited to those which can be connected either to a counter, or to a timer, or both. Also toys or games which lead to ambiguous interpretations and classifications of behavior (such as fingerpainting) would be eliminated. These criteria, of course, eliminate most, if not all, of the toys traditionally used in playrooms.

The use of timers and recorders would in no way dehumanize the child-therapist interaction. A therapist would still need to write his observations or a dynamic quality that could not be recorded mechanically or on tape would be lost. The trend and progress of therapy should be mechanically recorded but complemented and supplemented by the therapist's own dynamic notes.

Furthermore, and perhaps more importantly, no playtherapy should occur without a careful pre- and post-therapy psychodiagnostic evaluation of the child with a six-month to a year follow-up. Only through these types of baseline measures can we achieve some understanding of which child profits most by this type of therapy and which does not. Additionally, hardcore data from the playroom like time and frequency of any given behavior, will allow the validation of many psychodiagnostic and dynamic formulations which up to the present time have been based on crude information and nonempirically based observations and inferences. A continuous feedback between psychodiagnosis and playtherapy should make for a greater refinement of our diagnostic tools and an improvement in therapy practice and service to the child.

Conceptually, the phases of playroom behavior, (aggression and construction) are subdivided into subphases. The first subphase of aggression is characterized by random aggression. The child's impulses are let out, and he vents hostility openly. The initial random output of hostility becomes modulated into a second

subphase of competitive aggression with the therapist. This second subphase then gives way to the constructive phase which is also subdivided into a first subphase, constructive-destructive, where the child usually destroys what he builds by "playing war." The second subphase could be characterized as constructive-cooperative in which building goes on together with the help of the therapist as a cooperative endeavor. Eventually, playtherapy should end in a third subphase of independent construction.

The major dependent variable of playroom behavior would be the ratio of aggressive to constructive behavior with subratios among subphases. If these observations about playtherapy behavior have any validity, one would predict a decrease in the overalll ratio of aggression to construction with time. Although many children who have very strong controls, or neurotic, dependent, and anxious children may not follow in this sequence, eventually they might fit into this particular scheme just as well. There may be an initial fear of releasing their hostilities, but eventually the same sequence of phases would occur. It might take a little more time to reach the aggressive phase and from this phase on to the constructive phase. A correlated prediction of this conceptualization would be that the more the parents are involved in the therapeutic process, the faster this process will be.

A major goal of this type of playroom would be the quantification of playtherapy behavior over time. Quantifying the behavior of the child in the playroom will relate this dependent variable to the major independent variables, such as the pathology of the child as well as the pathology of the family. In this way, we should be able to collect significant results about children's behavior in playroom situations.

The physical separation of aggression and construction is based on a similar theoretical distinction made by Maier and Ellen (1959). They distinguish between aggression, which they view as frustration-instigated behavior, and construction, which they call motivated behavior, as essentially goal-oriented. Furthermore,

each phase finds pertinent background in the research literature: aggression in Buss (1961) and construction in various writings too numerous to cite concerning creativity, curiosity, novelty-seeking, and even cognition. A link that would allow an integrated conceptualization of both behaviors could be found in the catharsis hypothesis of psychoanalytic writers and of social learning theorists (Bandura and Walters, 1963).

The physical and conceptual distinction would also allow the independent testing of each phase according to contrasting theoretical viewpoints. In the case of aggression, for instance, although its heterogeneous nature is acknowledged, one could set up hypotheses based on psychoanalytic thinking versus hypotheses based on learning theory. According to the former theory, aggression could be the mainfestation of unconscious id impulses; according to the latter theory aggression is a habit following the usual laws of learning and extinction. Psychoanalytically, playtherapy is a form of drainage; in learning theory, playtherapy is a form of extinction. The main consideration in both theories, of course, would pertain to differentiating psychopathic aggression which is unresponsive to its consequences from neurotic aggression which is sensitive and, sometimes, adjusts to its consequences. It could be that psychoanalytic thinking would be more appropriate to neurotic aggression. Learning theory would be more appropriate to psychopathic aggression. In terms of predictions, one would expect that initially for acting-out children the ratio of aggression to construction would be greater at the outset of therapy.

This kind of playroom would allow more controlled variations than have been available up to the present time (sex of therapist and length and frequency of treatment), including the possibility of the therapist remaining in the observation - control room interacting with the child through an intercom to check on whether the phsyical presence of a therapist is as pertinent a factor as some therapists claim. Furthermore, the therapist would be able to manipulate toys and reinforcements at will. In the "construction" room, for instance, if the

child starts to behave aggressively, the therapist could switch the light off (and timer) and would inform the child that if he wishes to behave in this fashion he must go to the other room. If a child is prone to spend too much time in aggressive behavior, his behaving in such a manner could be made contingent to his using constructive behavior for a certain amount of time, as in Premack's principle (1965). According to this principle, the more probable response class will reinforce a less probable one. If this principle has any degree of validity (Homme et al., 1963), therefore, it could be that aggressive behavior, being the more important response class in a child, might be used as reinforcement for constructive behavior. Otherwise, it could be made contingent on constructive behavior, as in an example given by Premack, using a pinball machine and reinforcement with candies. The same arrangement permits comparison of time span in one activity to time span in another activity. This measure according to time fits also with what Premack has to say about time as a response measurement:

> A little reflection will show that time, or duration, will fulfill the requirement nicely. Given an operational definition of the onset and offset of behavior, a clock sensitive to the fulfillment of the operational definition will determine the duration for which the organism is in a state of the desired responding. The clock will not tick more rapidly because the rat is copulating rather than merely eating; the unit of measurement will be invariant from one behavior to the next. Moreover, time is intrinsic to all behaviors and thus can be universally applied, in contrast to all anatomical units such as the lick, which are intrinsic to given motor sequences and can be used to measure only those sequences composed of the unity in question. Time not only fulfills the requirement of measurement by a common unit, thus permitting comparison of anatomically diverse responses, but it takes priority over traditional response criteria such as common-

effect-upon-the-environment or anatomical similarity. In fact, these traditional criteria do not provide sufficient conditions for comments or ability, and the attempt so to use them can lead to more practices. Consider two response classes whose members are either substantially alike anatomically or which have like effects upon environment may have different average durations. Can the probabilities of the two classes be estimated comparatively from their frequencies? In which case is the organism more apt to be in a state of responding, when it makes 90 one second responses or ten 15 second responses? This example alone should make it clear that having a comparable effect upon the environment, such as getting a bar down, is not sufficient basis for comparing the frequency of two events when the frequency is to be used as an estimate of probability. Comparable average durations of the events in question is at least a necessary condition, and we would argue that it is a sufficient one."

The contingency of aggression to construction could also be based on the principle of reversibility of the reinforcement relation as suggested also by Premack (1965). Thus, it is important to first of all establish base rates unconstrained by any kind of reinforcement contingency, let us say for the first two or three hours of play. After base rates have been established for behavior in one of the rooms, then various types of reinforcement contingencies can be set up on the basis of intrinsic reinforcements gained by the use of each toy, which in a rather garish, showy fashion would indicate to the child how he is performing in terms of knowledge of results or else in terms of rewards of an extrinsic nature (candy, tokens, points, stars, and the like). Baselines could be established according to pretherapy evaluation <u>outside</u> of the playroom and on the basis of base rates of operant aggressive and operant constructive behavior <u>inside</u> the playroom.

Another advantage of this formulation would lie in the ease with which clinical practice could run parallel to research--with no separation. Research

data would be collected so painlessly that it would be relatively easy to accumulate reliable information within a short period of time. At the end of each hour, the therapist would need to record the time accumulated for each toy, resetting them for the next hour. Data thus collected could be ready for trend-analysis for each child much in the way suggested by Sidman (1960).

Since this type of playroom has some of the characteristics of traditional playrooms in the use of "toys," using on the other hand some features akin to behavior therapy, it combines the clinical with the laboratory approach. In this fashion, instead of dividing one from the other, it could bring the laboratory into the clinic and vice-versa, bridging the gap between traditionally static playtherapy on one hand and new advances in the operant observation and control of children suggested by the work of learning theorists.

Furthermore, this type of automatic recording would give the therapist more time to focus on "dynamics," making it possible for the psychotherapist to behave traditionally if he wants to. Or else, he could also continue to modify his behavior in a way that will modify the child's behavior according to operant procedures. Furthermore, this kind of proposal does not in any way preclude the use of tape recorders. In fact, they would be as desirable as the use of films suggested by Masling.

The major criticism for this proposal would be one of constraint in the sense that the child would not be free to choose, as in the case of traditional playtherapy. The child would be limited to a fairly small range of toys with which he would spend longer periods of time than in a traditional playroom. On the other hand, as far as the writer knows, even in traditional playrooms, the child limits himself to a very few favorite toys. It is the rare child, except for the hyperactive child, who will skip and jump from one toy to another. Consequently, if the aggressive room provides for two or three types of guns, pistols, and rifles connected with various targets, should be sufficient to fulfill the need for aggressive discharge. In the construction room, on the

other hand, besides a baseball game and shuffle alley, the child could be allowed to use a variety of other games.

In conclusion a different conceptualization of playroom behavior brings about the need for two different playrooms. This conceptual and physical separation should provide for more testable consequences than in the past. In these playrooms, the child's behavior can be controlled and modulated in a manner that traditional playrooms would not allow. Of course, the seeming advantages of this conceptualization should be tested. The author is now in the process of constructing a playroom based on the forgeoing rationale, to test it.

References

Allen, F. Psychotherapy with children. New York: Norton, 1942.

Axline, Virginia M. Play therapy. Boston: Houghton Mifflin, 1947.

Bandura, A. & Walters, R. J. Social learning and personality development. New York: Holt, Rinehart, & Winston, 1963.

Barry, H., III, Kinnard, W. J., Watzman, N., & Buckely, J. P. A computer-oriented system for high speed recording of operant behavior. J. exp. anal. Behav., 1966, 9, 163-171.

Buss, A. H. The psychology of aggression. New York: John Wiley & Sons, 1961.

Dorfman, Elaine. Play therapy. In C. R. Rogers, (Ed.) Client-centered therapy. Boston: Houghton Mifflin, 1951, pp. 235-277.

Ellen, P. & Wilson, A. S. Digital recording of simultaneous events in multiple operant chambers. J. exp. anal. Behav., 1964, 7, 425-429.

Esman, A.H. Treatment of personality disorders in children. In B. B. Wolman (Ed.) Handbook of clinical psychology. New York: McGraw-Hill, 1965, pp. 1323-1342.

Freud, Anna. The psychoanalytic treatment of children. New York: International Universities Press, 1946.

Haworth, Mary R. (Ed.) Child psychotherapy. New York: Basic Books, 1964.

Homme, L. E., De Baca, P. C., Devine, J. V., Steinhorst, R., & Rickert, E. J. Use of the Premack principle in controlling the behavior of nursery school children. J. exp. anal. Behav., 1963.

Kessler, Jane K. Psychopathology of childhood. Englewood Cliffs, N. Y.: Prentice-Hall, 1966, pp. 368-409.

Klein, Melaine. The psychoanalysis of children. London: Hogarth, 1932.

L'Abate, L. The laboratory method in clinical psychology. (M.S. in preparation.)

Levin, H. & Wardwell, Elinor. The research uses of doll play. Psychol. Bull., 1962, 59, 27-56.

Levitt, E. E. The results of psychotherapy with children: an evaluation. J. consult. Psychol., 1957, 21, 189-196.

Levitt, E. E. Psychotherapy with children: a further evaluation. Behav. Res. Ther., 1963, 1, 45-51.

Lippman, H. The treatment of the child in emotional conflict. New York: McGraw Hill, 1956.

Maier, N. R. F., & Ellen, P. The integrative value of concepts from frustration theory. J. consult. Psychol., 1959, 23, 195-206.

Masling, J. One man's viewpoint on training. Newsletter: Sec. Clin. Child Psychol., 1966, 5, 1.

Premack, D. Reinforcement theory. In D. Levine (Ed.) Nebraska Symposium on motivation: 1965. Lincoln; University of Nebraska Press, 1965, Pp. 123-180.

Ross, A. O. Learning theory and therapy with children. Psychother. Theory Res. Practice, 1964, 1, 102-108.

Sidman, M. Tactics of scientific research: evaluating experimental data in psychology. New YOrk; Basic Books, 1960.

Watson, R. K. Psychology of the child. New York: John Wiley & Sons, 1959.